

38. (Amended) A system for forming an optical image comprising:

(a) a complimentary screen of a two dimensional array of N (a real number) pixels, from which raster elements are to be generated;

G1 (b) a raster multiplying system comprising passive (non-controllable) elements to simultaneously form P raster elements from the pixels of said complimentary screen comprising one raster element according to a number of P constituent blocks of an image to be simultaneously formed on an image display plane by separating said light beam corresponding to said one raster element into light beam components to form P different raster elements, each formed by a respective light beam having a part of initial beam intensity, and transmitting light corresponding said P raster elements to modulation means and then to an image display plane so that one of said P raster elements is projected onto a corresponding one of said P blocks;

(c) an array of controllable light modulators to simultaneously and independently modulate each of said P raster elements for each of said P blocks, according to control signals applied separately for each block, each modulator having an optical output to coincide with a block of the image; and

(d) an image display plane on which an image with a resolution of M pixels is formed and displayed in a form of a matrix image comprising said constituent blocks as matrix elements, a said block comprising a two dimensional array of pixels, where the number M exceeds number N where said system components of (a), (b), (c), and (d) are placed in the mentioned order of the light path of the complimentary screen

G1

emitted light.

39. (Amended) A system for image recording comprising:

(a) a complimentary screen having a two dimensional array of N (a real number) pixels, from which raster elements are to be generated;

G2
2
(b) a raster multiplying system comprising passive (non-controllable) elements to simultaneously form P raster elements from the pixels of said complimentary screen comprising one raster element by separating a light beam corresponding to said one raster element into light beam components to form P different raster elements each formed by a respective light beam having a part of initial beam intensity, and transmitting light corresponding to one of said P raster elements to one of P image blocks; and

(c) a sensitive plane on which an image to be recorded is projected and which is scanned to convert light information into electric signals for recording, said image being presented as a matrix image comprised of a plurality of said blocks as matrix elements with a block comprising a two dimensional array of pixels, and all the blocks comprising M pixels, where the number M exceeds the number N, and where said system components of (a), (b), (c) and (d) are placed in the mentioned order of the light path of the complimentary screen emitted light.

G3
40. (Amended) A method for forming an image on an image display

plane by simultaneous forming of P constituent blocks of said image, so that the image is presented as a matrix image with blocks as matrix elements, a block having a two dimensional array of pixels, comprising the steps of:

(a) providing a complimentary screen having a two dimensional array of N pixels to generate an element of a raster for a block of an image;

(b) separating a raster element corresponding beam into beam components, each component having a part of initial beam intensity, to simultaneously form P different raster elements, one element for each of P blocks;

(c) transmitting the formed beam components to an array of light modulators which independently modulate each of said raster elements in accordance with control signals applied for each of said P blocks;

(d) repeating the procedure by successively generating other raster elements from said complimentary screen, to simultaneously form a modulated raster in each of P blocks and displaying said P blocks on said image display plane in the form of an image, said image having a resolution of M pixels, where M is greater than N.

REMARKS

Applicant's review of the amendment filed on March 21, 2001 has brought to light that the language of several of the claims was not correct and/or could be better stated. The foregoing amendments correct such errors.

The arguments set forth in the March 21, 2001 amendment are repeated.